
Abstract

A loudspeaker, having a not necessarily rectangular, planar or constant thickness oscillating member, made of relatively thick, low density, stiff, acoustic insulating material, in an elongated form, surrounded by a solid frame, supporting the oscillating member in a minimum number of pivots or flexible elements, placed in areas of points of specific dynamic balance, like one end, center of mass and center of percussion about a certain axis of the oscillating member. The oscillating member is set in vibration by a permanent magnet driver having the voice coil attached to the oscillating member and the permanent magnet assembly supported by a bridge mounted across the frame.

In an alternative preferred embodiment the oscillating member is built to incorporate at least one cavity filled with air or a gas different from air. In an alternative preferred embodiment the horizontally placed oscillating member has at least one voice coil immersed in a heat transferring fluid introduced in the cavity of the electromagnetic driver.